FIFTH BIENNIAL REPORT

OF THE

BOARD OF CONTROL

OF THE

MICHIGAN SCHOOL FOR THE BLIND

BY AUTHORITY.

HV1796
M5

LANSING:
ROBERT SMITH & CO., STATE PRINTERS AND BINDERS.
1890.

MICHIGAN SCHOOL FOR THE BLIND.

Separated from Institution for the Deaf and Dumb and the Blind, at Flint, in 1879. Located at Lansing 1881.

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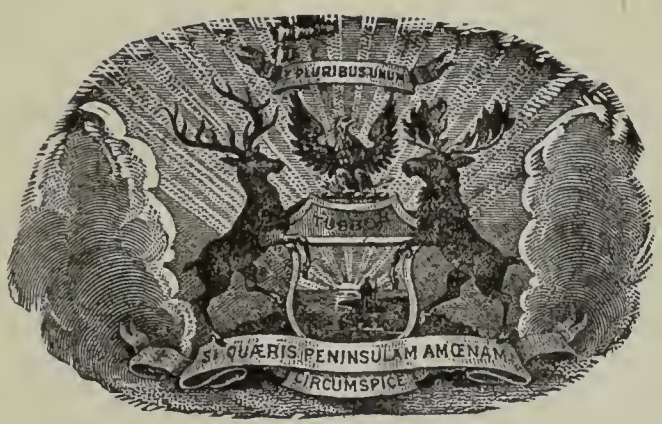
MICHIGAN SCHOOL FOR THE BLIND



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Gift of
A. M. Shotwell

BOARD OF CONTROL.

TOM S. APPLEGATE, - - - - - - - - - - PRESIDENT.
JAMES W. BELKNAP, - - - - - - - - - - SECRETARY.
DANIEL L. CASE, - - - - - - - - - - - TREASURER.

OFFICERS FOR 1889–90.

ROBERT BARKER, - - - SUPERINTENDENT, STEWARD AND BOOK-KEEPER.
MRS. JOSEPHINE PAMPELL, - - - - - - - - - MATRON.

TEACHERS OF LITERARY DEPARTMENT.

WM. E. DAVIS. ANTOINETTE E. LATSON.
MINNIE S. LARWILL. ANNA L. CROSS.

MUSIC DEPARTMENT.

AARON C. BLAKESLEE, - - - - - - TEACHER INSTRUMENTAL MUSIC.
MARY E. CASTELLO, - - - - - - - - TEACHER VOCAL MUSIC.
MARY L. McCREA, - - - - ASSISTANT TEACHER INSTRUMENTAL MUSIC.

HANDICRAFT.

ALICE DAILY, - - - - - - - - - TEACHER OF GIRLS' WORK.
O. N. STONE, - - - - - - - - - - TEACHER OF BROOM MAKING.

REPORT.

To the Governor of the State of Michigan:

The undersigned Board of Control of the Michigan School for the Blind have the honor to present herewith their fifth biennial report, covering the fiscal period from July 1, 1888, to June 30, 1890.

At the close of the calendar year 1888 we were enable to return to the State treasury the sum of eleven thousand, four hundred and sixteen dollars and seven cents, saved out of the appropriation made for the current expenses for the years 1887 and 1888, and of the appropriation for 1889 five thousand, one hundred and seventy-eight dollars and thirteen cents was not drawn from the State treasury and was charged out of our appropriation for that year. This was owing in part to our inability to complete certain necessary improvements in the building during the vacation of the school year of 1889, which improvements we have made during the vacation in 1890, the expense of which may exceed our appropriation for 1890.

The large amount of fuel heretofore consumed has caused the board much anxiety, and to find a remedy we engaged the services of Prof. R. C. Carpenter, of the Michigan Agricultural College, an expert on the subject of heating. His very able report is herewith submitted. Acting upon his report and suggestions we have made important changes in our system of heating, which we trust will result hereafter in large saving in the consumption of fuel.

During the period covered by this report we have reset the boilers in the engine house; have erected a small room adjoining the broom shop for storing broom corn and other broom material; laid new floors in the halls of the broom shop, and have removed the old closets and urinals from the broom shop and put in those of improved style, which are giving entire satisfaction.

We have purchased and set up in the chapel a pipe organ provided for by special appropriation of the last legislature, and have added a new upright piano to the musical department.

We have built a new refrigerator in one of the basement rooms for cold storage, which will enable us to keep our meat to be purchased by the side or quarter, and lessen the expense of daily purchase at the meat-market.

The lawn and grounds around the building have been kept in good condition and are admired by all who visit the institution.

At the beginning of the school year 1889, Mr. Robert Barker, who had been acting as steward and book-keeper for the previous six months, was

appointed superintendent in the place of Prof. George Barnes, who engaged in other business.

For a statement of the receipts and expenditures of the Board we refer you to the report of Treasurer Case, herewith submitted.

We ask your special attention to the report of Supt. Barker, which is herewith submitted.

The pupils have made commendable progress in their studies, and will compare favorably with those blessed with sight, in our common schools.

The number of pupils in attendance has been somewhat lessened by sickness; a large number were afflicted with La Grippe which prevailed during the past winter; when La Grippe had nearly run its course the measles was introduced, followed by the mumps. Nearly all who had not had these diseases were attacked, and a number quite seriously. Fortunately all recovered without serious results.

The progress of the pupils in instrumental and vocal music reflects great credit on their painstaking teachers, and their proficiency is a surprise to those who witness their performance.

The work in the broom shop, under the instruction of Mr. Stone, our teacher in that department, has improved very much, and many of the boys have become proficient and expert workmen.

The work in the girls' sewing room, under the efficient and painstaking care of Miss Daily, is the wonder of those visiting her department.

The Board will spare no labor or expense necessary to retain the high standard the school has attained, and are untiring in their efforts to lessen the cost of the maintenance of the institution to a minimum consistent with its greatest efficiency.

Courting a rigid examination into the conduct of the institution committed to our care, this report is respectfully submitted.

TOM S. APPLEGATE,
J. W. BELKNAP,
D. L. CASE.
Board of Control.

APPROPRIATIONS.

In accordance with law we submitted to the Board of Corrections and Charities the following summary of appropriations asked for, together with such other information as was desired.

BOARD OF CONTROL OF THE MICHIGAN SCHOOL FOR THE BLIND.

To the State Board of Corrections and Charities:

GENTLEMEN—In accordance with Act 86, of the Session Laws of 1889, we herewith submit to your honorable board our estimates of expenses for the years 1891 and 1892, with a statement of our expenditures for the two fiscal years from July 1, 1888, to June 30, 1890—both inclusive.

		Estimates for two years ending June 30, 1891, and June 30, 1892	Disbursements in two years ending June 30, 1889 and June 30, 1890.
1	Heating and water apparatus and water supply	$1,900 00	$1,044 33
2	Library and apparatus	300 00	80 26
3	Furniture	300 00	206 85
4	Printing, office books, stationery and postage	200 00	153 40
5	Mnsical instruments, music, etc.	500 00	298 22
6	Kitchen and dining room furnitnre	300 00	302 35
7	Bedding	300 00	315 35
8	Laundry—tubs, soap and starch	450 00	444 20
9	School salaries	8,840 00	8,840 00
10	General salaries	8,200 00	8,025 00
11	Groceries	8,600 00	1,164 04
	Meat and fish		2,790 60
	Butter, lard and eggs		1,578 33
	Flour and meal		684 50
	Vegetables and frnit		1,176 70
	Milk		312 72
	Syrup and sugar		851 94
12	General expenses	2,500 00	2,720 15
13	Fuel—wood and coal	7,000 00	6,798 42
14	Lights—other than electric	75 00	42 78
15	Medicine and medical expenses	600 00	655 80
16	Hay straw and grain	500 00	337 82
17	Live stock—including cows	75 00	72 04
18	Wagons, carriages and harness	500 00	25 40
19	Tools	50 00	45 48
20	Broom shop materials and wages	1,000 00	3,677 77
21	Pnpils' clothing and traveling expenses	1,200 00	1,210 40
22	General repairs and renewals—including work and materials	2,500 00	1,500 21
23	Girls' work room	100 00	52 78
24	Electric lighting apparatus	800 00	691 35
	Total	$46,790 00	$46,099 19

The number of pupils entered 1889 was 103; the number of pupils entered 1890 was 95. This falling off in the attendance of pupils was caused by sickness. Most of the pupils were attacked by the prevailing influenza or grippe, several left the institution for their homes and did not return. Our pupils had hardly recovered from this grippe when one of the absent pupils returned and introduced measles, which went through the school very generally. As many as forty were afflicted with this unpleasant disease, and a few quite seriously.

The report from the Secretary of State shows about twenty-five children in the State of suitable age and condition to enter the school, not on our rolls. There are undoubtedly others not reported by the Secretary of State, many of whom we hope to bring in, and we think it reasonable to estimate the average number for 1891 and 1892 at one hundred.

You will perceive that in our estimates for current expenses for the coming two years, we ask for some two thousand dollars less than the appropriation made for 1889 and 1890. The table of estimates for the next two years needs some explanation, which is herewith presented.

No. 1. Repairs on boilers will be necessary, and the arches need resetting. We estimate the cost six hundred or seven hundred dollars.

No. 3. A number of bedsteads and tables will be needed to replace those worn out and dilapidated; new carpets will be needed for the superintendent's offices and matron's parlor.

No. 5. The amount asked for in excess of the two years' expenditure, includes the purchase of a square piano, which is very necessary, and we estimate the cost about two hundred and twenty-five dollars.

No. 10. This item is to cover increase of wages of employés.

No. 20. The broom shop has been nearly self-supporting in the past two years, but we do not anticipate equal results the coming two years, for the reason that a number of the most experienced pupils in that department have completed their studies and will not return to the institution.

The board contemplate introducing cane chair seating, and some other branches of manufacture which we believe will be very helpful to this unfortunate class. Hence the one thousand dollars asked for the broom shop.

No. 22. The increased appropriation here asked for is largely because of the overhauling of the heating apparatus, by which we hope to make a large saving in the consumption of fuel; and the slate roof on the old main building will require considerable repairs, as it leaks in a dozen or more places, and the slate roof on the broom shop and the superintendent's cottage will need repairs, as they both leak. These repairs will increase the expenditures under this head.

No. 23. No appropriation was asked for for this item in 1889. The amount now asked for is for material.

No. 24. New belting and rewinding of the armature of the dynamo account for the increase in this item.

Under specification No. 9, are the following teachers:

Robert Barker	Superintendent, Steward and Bookkeeper	$1,000 00	Resident.
Wm. E. Davis	1st Lit. Teacher	400 00	"
Antoinette Latson	2d Lit. Teacher	300 00	"
Minnie S. Larwill	3d Lit. Teacher	300 00	"
Annie L. Cross	4th Lit. Teacher	200 00	"
Aaron C. Blakeslee	Teacher Inst. Music	700 00	Non-resident.
Miss M. E. Castello	Teacher Vocal Music	300 00	Resident.
Miss M. L. McCrea	Assistant Inst. Music	200 00	"
Alice Daily	Teacher sewing and girls work	400 00	"
O. N. Stone	Broom maker	600 00	Non-resident.

Under classification No. 10 are grouped the following employés other than teachers:

Mrs. Josephine Pampell	Matron	$300 00 per year	Resident.
O. A. Chandler	Watchman	30 00 " month.	Non-resident.
Wm. Toolan	Engineer	50 00 " "	Resident.
A. Robb	Fireman	30 00 " "	Non-resident.
James Evans	Man-of-all-work	30 00 " "	"
A. H. Hoes	Teamster	30 00 " "	"
Ida V. Keene	Visitors' attendant	3 00 " week	Resident.
Mrs. M. A. Sloan	Nurse	4 00 " "	"
Lizzie Graham	Cook	5 00 " "	"
Aggie Harton	Baker	2 50 " "	"
Lizzie Drapert	Dining room girl	2 50 " "	"
Addie Phelps	" " "	2 50 " "	"
Dora Bennett	" " "	2 50 " "	"
Mina Wilhelm	Chamber maid	2 50 " "	"
Ella Allendinger	" "	2 50 " "	"
Orie Chandler	" "	2 50 " "	"
Mrs. M. Durk	Washerwoman	20 00 " month.	Non-resident.
Addie Durk	Ironer	19 50 " "	"

We ask for the following special appropriation: For painting and penciling exterior of buildings, $2,600.00.

We asked for the same appropriation in our last report, and our needs for it are greater now than then, and we hope your honorable board will see the necessity and advisability of the appropriation.

Hoping that with these explanations our estimates will meet with your approbation, we are, respectfully,

TOM S. APPLEGATE,
J. W. BELKNAP,
D. L. CASE,
Board of Control, Michigan School for the Blind.

To this communication we received the following reply:

STATE OF MICHIGAN,
BOARD OF CORRECTIONS AND CHARITIES,
Lansing, Michigan, October 8, 1890.

Board of Control of the Michigan School for the Blind, Lansing:

GENTLEMEN—Your communication to the State Board of Corrections and Charities, submitting for its consideration and opinion the proposed appropriation for your institution for the next two years has been received.

We visited the School for the Blind as required, on September 15, and "investigated the condition and needs of the same." We have carefully considered the appropriations proposed and respectfully submit our opinions of the same.

Current expenses, $23,000 for each of the years 1891 and 1892, is approved. Painting building, $800, is approved.

GEO. D. GILLESPIE,
Chairman.

L. C. STORRS,
Secretary.

SUPERINTENDENT'S REPORT.

To the Board of Control of the Michigan School for the Blind:

GENTLEMEN—Permit me to submit to you a statement of the affairs of this institution for the two years beginning July 1, 1888, and ending June 30, 1890, which comprise the ninth and tenth annual sessions of the school since its location at Lansing in 1880.

ATTENDANCE.

The number of pupils enrolled during the school year 1888–89 was 103, of whom 60 were males and 43 were females; of these 22 had not previously been enrolled. The average attendance was 88.

The number enrolled during the school year 1889–90 was 95, of whom 56 were males and 39 were females; 15 had not previously been members of the school. The average daily attendance was 79. The number of different pupils in the two years was 120—72 males and 48 females. Average daily attendance for the whole time 88½. At the close of the last term, three pupils, having completed the course of study, received diplomas.

COUNTIES.

The number of counties represented in the institution during these two years was 45. The number of pupils from each county was as follows:

Allegan	1	Jackson	3	Monroe	2
Bay	3	Kalkaska	1	Mecosta	1
Berrien	3	Kalamazoo	4	Oakland	1
Calhoun	3	Kent	6	Oceana	2
Charlevoix	1	Lenawee	3	Ottawa	6
Clare	1	Lapeer	3	Otsego	1
Clinton	1	Livingston	3	Ogemaw	2
Cheboygan	1	Mason	1	Saginaw	3
Eaton	6	Marquette	1	St. Clair	3
Genesee	4	Macomb	3	Sanilac	2
Houghton	1	Manistee	1	St. Joseph	1
Huron	2	Menominee	3	Tuscola	2
Hillsdale	2	Montcalm	2	Van Buren	1
Ingham	8	Missaukee	1	Washtenaw	4
Ionia	4	Muskegon	7	Wayne	6

The following table is a statement of the number of pupils in attendance in each of the ten years since the school was established:

School Year.	No. of girls.	No. of boys.	Total No. of pupils.
1880 and 1881	22	33	55
1881 " 1882	30	33	63
1882 " 1883	31	37	68
1883 " 1884	33	37	70
1884 " 1885	36	37	73
1885 " 1886	42	41	83
1886 " 1887	41	53	94
1887 " 1888	36	51	87
1888 " 1889	43	60	103
1889 " 1890	39	56	95

The average attendance during the last term was somewhat lessened by sickness. In the early part of the term quite a large number were afflicted with La Grippe, and before fully recovered from its effects, measles broke out and nearly every one in the school who had not had the disease came down with it; in all thirty-one pupils, one teacher and three domestics. Some were seriously ill, but all recovered from the measles. Four, however, were so much debilitated by the two afflictions that they could not resume their school work, and went home.

Among those connected with the school during the two years two deaths have occurred. Miss Louise Schoen, a young lady from Lenawee county, had been afflicted with heart disease for some months. Becoming worse, she went to her home in Adrain, Nov. 12, where she died Dec. 6. The other death occurred in the Institution. Mrs. E. M. Miller, our esteemed and efficient nurse, died March 12, 1890, from brain disease following La Grippe. Several severe cases of mumps occurred shortly after measles disappeared, and were confined to the hospital ten or twelve days. All recovered without serious results.

Four others were returned to their homes during the term, on account of mental, physical, or moral disabilities to receive any benefit from the school.

Nothwithstanding these embarrassments in the past year thorough good work has been done in the class-rooms and music department by the persevering energy of our able and intelligent teachers. Very gratifying improvements have also been made in the discipline and moral of the school.

The number enrolled has gradually increased since the establishment of the school, and from statistics gathered through official sources, at least twenty-five or thirty more should be added to the present enrollment. The capacity of the building is ample for more than that increased number, and we hope in the near future to see such interest in securing and using the excellent opportunities the State has so munificently provided, that not one uneducated blind child in the State will be contented to remain away.

In this connection I may be allowed to express the hope that greater promptness in arrival at the beginning of the term may by parents and pupils be regarded of more importance. Much valuable time is lost when only a part arrive during the first week of the term, and pupils do not receive, as they should, the full benefits of the provision the State has made for their education.

There are some parents, I regret to add, who seem censurably careless in this regard. Yielding to the wishes and caprices of their children, they allow them to wait till the term is well advanced, and even to miss a

whole year, and then return. Others permit them to leave the school for trivial reasons, in the middle or latter part of the session, thus embarrassing the closing work of the term, and doing an injury to the pupils themselves, who would be greatly benefitted by the thorough drill of the weeks preceding the closing examinations.

The following statement of the experience of the past two years is in part the foundation of the foregoing remarks: On the first day of the term beginning September 19, 1888, thirty-one pupils were present, during the first week sixty-one were present, enrolled during the year one hundred and three; forty-two thus entering at irregular times.

On the first day of the term beginning September 18, 1889, forty-five pupils were present, during the first week fifty-four pupils were present, enrolled during the year ninety-five; forty-one thus entering at irregular times.

When children must necessarily be absent they should be excused by the superintendent, but parents should send them promptly and regularly every term and require them to remain till the close, except for sufficient reasons of which the Board of Control should be the judges.

I can not emphasize too strongly the importance of every pupil being present promptly on the first day of the term, that the classification and organization of the school may be completed as far as possible the first week, and the whole time be profitably used.

Another point of great importance is that children enter the school as soon as they are eligible under the law, which is at the age of ten years. It is indeed gratifying that discretionary power is given the Board of Control to admit them two or three years younger, which is wisely exercised, greatly to the benefit of the children thus favored. They learn much more rapidly than children who begin at a more advanced age, their fingers being soft and flexible, touch sensitive, minds active, and memories retentive.

Parents should not object to parting with their children even at this tender age, for at most they are children for only a few years, and what can be done to fit them for usefulness and happiness in their later life should be done in these years.

They are as well cared for here as in most good homes, being supplied with all that is necessary for their comfort and happiness, provided with medical attendance and medicine if ill, and tenderly and skillfully nursed by competent nurses.

If any parents are so inconsiderate as to refuse to allow their blind children to come here to receive almost every needed mental, physical, moral and social endowment, and to be returned to them cultured and refined, and all without cost to them, why should not the State, as guardian of her wards, step in and say, "these are mine, and they must be cultured and prepared to take honored places in the commonwealth, and not left unprepared to act well their part in life's duties." Would not this wiser affection on which is based a considerate authority, be preferable to that devotion of mothers, which loves fondly, but blindly?

Legislation has already made provision for finding and reporting the blind children of the State; if the approaching legislature will make provision to secure their attendance at school, it will deserve their gratitude and that of their friends henceforward.

Prompt and regular attendance being secured, the successive steps in educating the blind should receive no less careful consideration. With young children the natural order in which the faculties of the mind unfold

themselves should be followed. They can only apprehend the near before the remote can be grasped, and begin with individual things, facts, or objects, upon which they bestow their attention and exercise their powers of observation.

With the blind as with the seeing, the first subjects of instruction are presented to the senses. And to the development of these the kindergarten gives particular attention, as the means of communication, between external objects and the mind.

This training is especially directed to the sense of touch through a systematic course of object lessons. The blind depend on this sense to read and to accomplish what the seeing do with their eyes.

EARLY HOME TRAINING

of blind children, when judiciously directed, can do much to prepare them for the school work, but this is too often sadly neglected. The ordinary uses of the hand are too often disregarded, as shown by some children, who, on entering school, are not able to dress themselves, or even to eat properly. Assuming that the same intimate relation exists between the hands and development of the brain, as between the seeing eye and the active brain, why should not intellectual and moral growth be correspondingly retarded?

THE KINDERGARTEN

does much of the foundation work in educating blind children. Here they engage in clay-molding, paper-folding, block-building, paper-weaving, and other occupations calculated to develop tactual sense, and the power of observation. Habits of attention, punctuality, truthfulness and politeness, as well as proper and confident carriage of the body; uses and graceful positions of the hands are also systematically taught. Twelve pupils in this school have been in the kindergarten training two or three years, and twelve others only one year, but should continue one or two years longer.

THE LITERARY WORK

pursued during the past two years embraces first grade Kindergarten, names and forms of objects, their qualities as: hardness, smoothness, roughness, solidity, weight (comparative), shape or figure, edges, corners, faces, uses, and counting, braiding three and four strands, block building, braiding paper mats, learning point and line alphabets, marching, calisthenics accompanied by instrumental music, singing, hand and finger movements, etc.

SECOND GRADE.

Kindergarten continued, language lessons, memorizing, reading in New York point and line letters, writing New York point, arithmetic, geography, object lessons, general knowledge, manual training and spelling.

THIRD AND FOURTH GRADES.

Reading, spelling, arithmetic, geography, grammar, writing, history, literature and general knowledge.

FIFTH AND SIXTH GRADES.

Arithmetic, geography, history, analysis, physical geography, physiology, algebra, natural philosophy and civil government.

SEVENTH AND EIGHTH GRADES.

Algebra, geometry, rhetoric, chemistry, moral philosophy, and English literature.

One hour each evening is devoted to imparting general knowledge by

reading to the school in two classes, the current events of the day (not sensational), and such selections of good books as interest and give a general knowledge of men and things.

Physical development by exercise in the gymnasium, on the lawn, roller skating, jumping rope, and such amusements as call in action the general muscular system accompanied by wholesome mental action, is considered an absolute necessity for the health of the children and their harmonious development.

The course of study comprises most of the branches in the common high school, but these have not been pursued in the regular order of a thoroughly graded school. Of the older pupils, some had pursued a part of the higher branches some time ago; others have had the same studies during the present year. As a step toward a thorough gradation, the older and more advanced students, who had completed the course of study, were brought together for general reviews and examination with reference to graduating. They entered upon the work with commendable earnestness. Three of the class, George Dean of Berrien county, Gertrude Wyman of Macomb county, and Albertina Barkow of Ingham county, sustained creditable and satisfactory examinations and were given diplomas.

These were the first to be given diplomas since the first year after the school was located in Lansing.

The good influences of the preparatory reviews and examinations were very apparent on the entire school, both in a stimulated desire to do good work, and in elevating the general tone of the school, nearly all disorderly deportment entirely disappearing, encouraging a hope of the continuance of these good influences in the future.

The young man who graduated was awarded in connection with his diploma a certificate of qualification and skill in music and piano tuning, and is meeting with success in his work of piano tuning.

MUSIC DEPARTMENT.

Pipe organ and one new upright piano have been added to the equipments of this department. The piano was needed for use in the tuning department. I would recommend that two of the square pianos that have been in use many years, be transferred to the tuning department, and their places be supplied with new instruments. The two that are now in the tuning department are worn out.

The work in the music department has been well conducted, and the results are very satisfactory. Under Mr. Blakeslee's instruction were seventeen on the piano, four on the violin, one on the cornet, one on the clarionet, five on the pipe organ; a class of eight in harmony, eleven in piano tuning, and twelve in orchestra.

THE TUNING DEPARTMENT

labored under somewhat trying disadvantages. The square pianos that have been in constant use for that purpose for quite a number of years are unfit for use, and others are needed to replace them in order to carry on the work successfully. We have been compelled to lessen the number of pupils in the class, owing to the lack of proper instruments to work with. The one new upright piano, bought last year for use in this department, is now all we have to depend on for good work. In all other respects this department has been well sustained.

The orchestra has, during the last two years, maintained its reputation

for good work. In the last term it has studied and mastered eight compositions.

Nearly all the advanced pupils in music have been instructed in the art of reading music by Waite's "Tangible Musical Notation," in which many of them have become quite proficient.

It is also gratifying to report that the twenty-four pupils taught by Miss McCrea, under Prof. Blakeslee's supervision, have done excellent work during the past year.

In the vocal department, under the care and instruction of Miss Costello, in 1888 and 1889, twenty-four pupils were instructed in private lessons, each learning from two to twelve pieces, beside the study of scales and exercises. The whole school was also included in the senior and junior choirs. In addition to their practice in scales, exercises, and the principles of music, the senior choir learned twenty-three selections and eleven choruses, and the junior choir learned thirty-three selections. In 1889–90 twenty-one pupils were instructed separately, each learning a number of songs besides scales and exercises. The senior choir learned nine authems and choruses, and also several selections; the junior choir twenty-one selections. The results were very satisfactory.

INDUSTRIAL DEPARTMENT.

The work in the broom shop for the boys, under the supervision of Mr. O. N. Stone, has been carried on with good practical results, the value of brooms and brushes made exceeding the cost of material and labor.

No. brooms made from July 1, 1888, to June 30, 1889	8,112
No. brushes made from July 1, 1888, to June 30, 1889	948
No. brooms made from July 1, 1889, to June 30, 1890	8,784
No. brushes made from July 1, 1889, to June 30, 1890	1,272

Nine of the boys in the two years have become proficient in the art of broom making, and six of them are conducting shops of their own.

In the girls' work room the usual industries have been carried on, viz.: plain and fancy sewing, knitting, crocheting, the use of the sewing machine, such work as hemming towels, table cloths, sheets, pillow slips, and making some of the garments for the girls, is neatly and substantially done, under the instruction of Miss Daily, our very efficient teacher in this department.

The national convention of the superintendents and instructors of the blind, held in Jacksonville, Ill., in July last, was largely attended by those in charge of the institutions in the United States and in Canada. This institution was represented by the delegates chosen by the board,—the superintendent and Miss Alice Daily—also by Miss Latson as visiting member. It was an occasion of much interest and benefit to all present, many able papers being read and discussed on topics relating to the education, care, and occupation of the blind. Such conventions are conservators of past good work, and progressive toward better methods and more satisfactory results.

GRATEFUL ACKNOWLEDGMENTS

of many kindnesses and favors shown to the school by individuals and organizations, are due, especially to ex-Gov. R. A. Alger, for his liberal gift of one hundred dollars to the school, for the purchase of Christmas remembrances for the children; to Gov. C. G. Luce for his presence at the commencement exercises, in June, and excellent address on "Things for

which to be Thankful;" to Prof. H. R. Pattengill for his address to the school on "Manual Training;" to Rev. J. M. McGrath for his address to the graduates, and his kind invitation to the entire school to attend Pinafore at the opera house; to Rev. W. S. Sly, for prayer service on various occasions, and for his kindness in conducting the funeral of Mrs. Miller; to Mrs. R. J. Shank for tickets of invitation to the older pupils to her music recital; to Mrs. C. G. Cook of Detroit for Christmas gifts to the pupils; to ex-mayor John Crotty, and also to the Congregational choir for providing rare musical entertainments for the school.

We also desire to express thanks to the Michigan Central, to the Detroit Lansing and Northern, to the Lake Shore and Michigan Southern and to the Chicago and Grand Trunk Railroad Companies for their kindness in giving one fare for round trip tickets to pupils and teachers to go to and return from their homes in vacation. We also kindly appreciate the favors of the publishers of the daily State Republican, the daily Adrian Times and Expositor, the Ingham County News, the Ingham County Democrat, the Flint Globe, and the Vassar Times, for sending to us regularly their publications without charge.

We are also under obligations to the Society for Providing Evangelical Literature for the Blind, for fifty copies of the Sunday School Weekly, each week, in raised print.

My thanks are also due to the teachers for their cordial coöperation in making the work of the school so thoroughly efficient in all its departments, and to all the other employés of the institution for the prompt, faithful, and pleasant manner in which they have performed their duties.

ROBERT BARKER,
Superintendent.

CATALOGUE OF PUPILS.

IN ATTENDANCE DURING THE BIENNIAL PERIOD OF THIS REPORT.

MALES.

Name of Pupil.	Cause of Blindness.	Residence.—County.	Years' Attendance.	
Walter Brigham	Cateract	Livingston	1889	1890
James Bowen	Heat just after birth	Eaton	1889	1890
Otto Ernst	Scarlet fever	Wayne	1889	1890
Oscar Wicks	Whooping cough and scarlet fever	Tuscola	1889	1890
Joseph Henrietta	Explosion percussion cap	Menominee	1889	1890
Willie Walters	Unknown	Clinton	1889	1890
Freeman Liontz	Inflammation	Huron	1889	1890
Fred Dickman	Inflammation	St. Clair	1889	1890
James Pollard	Paralysis optic nerve	Eaton	1889	1890
Alburtus Frank	Scrofulous ophthalmia	Kalamazoo	1889	1890
Daniel Bracelin	Scarlet fever	Allegan	1889	1890
Phillip Raboin	Scarlet fever	Menominee	1889	1890
Joseph Wood	Inflammation	Oceana	1889	1890
Thad Simmons	Near-sighted	Ionia	1889	
Frank Demorest	Unknown	Mason	1889	1890
Loren Gates	Unknown	Oakland	1889	1890
Charles Green	Accident with knife	Oceana	1889	1890
Charles Olney	Congenital	Charlevoix	1889	
Austin Wilson	Diphtheria	Calhoun	1889	
George Trumble	Cataract	Saginaw	1889	1890
Lester Beach	Accident with fork	Eaton	1889	
Dean Gray	Inflammation	Wayne	1889	1890
Albert Miller	Scarlet fever	Hillsdale	1889	1890
William Palmer	Paralysis optic nerve	Ingham	1889	
John Elder	Spotted fever	Ingham	1889	1890
Town T. Clark	Vision poor from birth	Eaton	1889	1890
Lovell Bass	Cateract	Kent	1889	
William J. Kelly	Cold and inflammation	St. Clair	1889	1890
Walter Kingston	Severe cold	Bay	1889	1890
John Hoek	Atrophy optic nerve	Kalamazoo	1889	1890
Carl Maser	Repinitis	Wayne	1889	1890
James P. Hamilton	Accident with scissors	Calhoun	1889	1890
John Tuck	Inflammation of brain	Jackson	1889	1890
James Running	Gunshot	Lapeer	1889	1890
Albert Main	Neglect at birth	St. Clair	1889	1890
Fred Kurtz	Inflammation	Saginaw	1889	1890
Kasmir Balwinski	Unknown	Bay	1889	1890
Elba Huff	Granulation lid	Kent	1889	1890
Frank Kenyon	Unknown	Jackson	1889	1890
Adelbert Jordan	Accident with steel filings	Berrien	1889	1890
Truman Perrigo	Accident with scissors	Montcalm	1889	
Will Rich	Congenital	Ingham	1889	1890
George Hunt	Explosion in mine	Menominee	1889	
John Foley	Cateracts		1889	1890
Floyd Waite	Cateracts	Ingham	1889	1890
Guy Conger	Neglect at birth	Genesee	1889	
Harry Miller	Congenital	Ottawa	1889	
Frederich Hoar	Inflammation	Marquette	1889	1890
Frank Keesler	Granulation	Eaton	1889	
Edward Thompson	Scarlet fever	Muskegon	1889	

CATALOGUE OF PUPILS.—CONTINUED.

MALES.

Name of Pupil.	Cause of Blindness.	Residence.—County.	Years' Attendance.	
George Dean	Unknown	Berrien	1889	1890
Franklin Simmons	Measles	Wayne	1889	
Orrin Nichols	Neglect	Otsego	1889	1890
William Roe	Paralysis optic nerve	Wayne	1889	
William Satechewski	Measles	Wayne	1889	1890
Jos. Bambach	A fall	Washtenaw	1889	
Joseph Scoda	Chemical explosion	Wayne	1889	1890
Myron Sanford	Charaeditis and mystagnus	Kalamazoo	1889	1890
Charles Fryk	Unknown	Muskegon	1889	1890
Edward Smith	Blind from birth	Ottawa	1889	1890
Roy Cook	Congenital	Wayne		1890
George Donovan	Accident	Ogemaw		1890
George Halleck	Congenital	Genesee		1890
Frank Haun	Congenital	Houghton		1890
John Holland	Epileptic convulsion	Genesee		1890
Charles VanEtten	Congenital	Ottawa		1890
Frank Allison	Congenital	Muskegon		1890
Henry Soerhiede	Accident	Ottawa		1890
Herman Schultz	Congenital	Ionia		1890
Joseph Conahan	Congenital	Wayne		1890
Thomas L. Lewis	Congenital	Ingham		1890

FEMALES.

Emma Hogan	A cold	Macomb	1889	1890
Albertina Barkow	Inflammation of brain	Ingham	1889	1890
Celia Durgin	Inflammation	Missaukee	1889	1890
Kittie Simpson	Scarlet fever	Ingham	1889	1890
Mary Forton	Cutting teeth	Macomb	1889	1890
Annie Birk	Ophthalmia	Cheboygan	1889	1890
Minnie Pickell	Spinal fever	Montcalm	1889	1890
Minnie Regelin	Congential	Montcalm	1889	1890
Anna Duplanti	Congenital	Bay	1889	1890
Maggie Keiser	Unknown	Ottawa	1889	1890
Elsie Jensen	Small-pox	Mecosta	1889	1890
Therese Bock	Jaundice	Saginaw	1889	1890
Gertrude Wyman	Glaucoma	Macomb	1889	1890
Retta Knight	Spinal meningitis	Hillsdale	1889	1890
Minnie Cross	Congenital	Washtenaw	1889	1890
Bertha Hatchler	Cruelty of father	Livingston		
Della Moreland	Congenital	Tuscola	1889	1890
Carrie Connor	Unknown	Ogemaw	1889	1890
Mary Catherman	Congenital	St. Joseph	1889	1890
Emily Stevens	Whooping cough	Van Buren	1889	1890
Jennie Reid	Unknown	Huron	1889	
Anna Smith	Scarlet fever	Livingston	1889	
Mabel Gilmore	Spinal meningitis	Washtenaw		1890
Grace Playter	Congenital	Kent	1889	1890
Cora Playter	Congenital	Kent	1889	1890
Anna Ellonson	Film on eye	Manistee	1889	1890
Lovinia Richardson	Paralysis	Ionia	1889	1890
Jennie Sherman	Congenital	Sanilac	1889	
Maggie Goggins	Disease and malpractice	Kent	1889	1890
Jessie Anderson	Malarial fever	Calhoun	1889	1890
Ada Hubbard	Congenital	Kalkaska	1889	1890
Clara Wilson	Congenital	Lapeer	1889	1890
Adaline Otto	Inflammation	Berrien	1889	1890
Mary B. Dayton	Chicken-pox	Clare	1889	1890
Louise Schoen	Inflammation	Lenawee	1889	1890

CATALOGUE OF PUPILS.—CONTINUED.

FEMALES.

Name of Pupil.	Cause of Blindness.	Residence. County.	Years' Attendance.	
Minnie Sturtevant	Inflammation	Eaton	1889	
Alma Edmonds	Unknown	Monroe	1889	1890
Anna Hinds	A cold	Muskegon	1889	1890
Carrie Crane	Unknown	Ingham	1889	1890
Jennie Loague	Granulation	Montcalm	1889	
Lavinia Newland	Measles	Ionia	1889	
Bertha Austin	Cutting teeth	Ottawa	1889	1890
Maggie Cook	Inflammation	Muskegon	1889	1890
Bertha Wilson	Unknown	Lenawee	1889	1890
Ruth Tompkins	Measles and whooping cough	Genesee	1889	1890
Ellen Fryk	Unknown	Muskegon	1889	1890
LuElla Thayer	Accident with fish spear	Washtenaw		1890
Mabel Sanderson	Scarlet fever	Macomb		1890

OFFICERS AND EMPLOYEES.

Names.	Services.	Rate.	Residence.
Robert Barker	Supt. Steward and Book-keeper	$1,000 00 for 12 mos	Non-resident.
Mrs. Josephine Pampell	Matron	300 00 for 12 "	Resident.
Wm. E. Davis	1st Literary Teacher	400 00 for 10 "	"
Antoinette E. Latson	2d " "	300 00 for 10 "	"
Minnie S. Larwill	3d " "	300 00 for 10 "	"
Anna L. Cross	4th " "	200 00 for 10 "	"
Aaron C. Blakeslee	Teacher Instrumental Music	700 00 for 10 "	Non-resident.
M. E. Castello	" Vocal Music	300 00 for 10 "	Resident.
Alice Daily	" Sewing and knitting	400 00 for 10 "	"
M. L. McCrea	Assistant Teacher Inst'l Music	100 00 for 10 "	"
O. N. Stone	Teacher Broom Making	50 00 for 1 "	Non-resident.
Wm. Toolan	Engineer	50 00 for 1 "	Resident.
O. A. Chandler	Night Watchman	30 00 for 1 "	Non-resident.
A. Robb	Fireman	30 00 for 1 "	" "
James Evans	Man-of-all-work	30 00 for 1 "	" "
Alex. H. Hoes	Teamster	30 00 for 1 "	" "
Ida V. Keene	Visitors' Attendant	3 00 per week	Resident.
Mrs. M. A. Sloan	Nurse	4 00 "	"
Mrs. Kate Stirling	Cook	6 00 "	"
Elizabeth Graham	Baker	2 50 "	"
Aggie Horten	Dining Room Girl	2 50 "	"
Lizzie Drapert	" " "	2 50 "	"
Addie Phelps	" " "	2 50 "	"
Dora Bennett	" " "	2 50 "	"
Mina Wilhelm	Chambermaid	2 50 "	"
Ella Allmendinger	"	2 50 "	"
Orie Chandler	"	2 50 "	"
Mrs. M. Dirk	Washwoman	20 00 per month	Non-resident.
Addie Dirk	Ironer	19 50 "	" "

CHANGES IN THE PLAN OF HEATING MAIN BUILDING.

REPORT OF PROF. CARPENTER.

To the Board of Control, State School for the Blind:

GENTLEMEN—In accordance with your request, I made an examination of the system of heating in use in the State School for the Blind, and prepared plans and drawings to modify it so as to be more economical so far as the use of steam is concerned.

The system in use is that known to steam fitters as the "indirect system of heating." The method is to place a steam radiator at the bottom of a flue leading to a given room. In this way the room is supplied with a current of heated air, and good ventilation is secured.

The more common way is to place a radiator in the room to be heated, and thus secure the advantage of radiated heat, instead of conducted heat. This method requires only about 40 per cent. the amount of coal required by the other method, in order to secure the same degree of heat, but the ventilation thus secured is not nearly so good. The first method introduces very many times as much air as is needed for ventilation to keep the room warm. The second method depends upon accidental circumstances to secure ventilation.

On looking over your buildings, I found that the system of construction used would admit of the use of the new system of heating, which combines all the advantages of the first system, with very many of the second. That is, we can positively introduce into each room a large body of fresh air, partially heated, while at the same time the occupant of the room will be warmed by radiated heat. We thus will give him the advantage of pure air and radiated heat. That is, he will receive heat by both conduction and radiation. There are very many people who believe that radiated heat is necessary to the fuller development of the body. No one questions the necessity of pure air.

This change is brought about by reversing the air currents in the chimneys supplying the building, and this can be done in a positive manner by cutting off the flues, as explained in my specifications to your engineer.

Each room is already supplied with an exhaust flue for foul air, which leave as it is. The large flues, leading to the various halls are to be connected to the pure air outside, and the tops of these flues stopped to prevent the escape of this warm air above the building. This warmed air will then be discharged at frequent intervals into the halls and corridors.

Each sleeping room is now provided with a grated opening leading into the halls, which cannot be closed. Through this opening the pure and

partially warmed air from the halls will pass into the various rooms to be further warmed by the direct radiator, and, finally loaded with impurities, will pass outward through the heated foul air shafts. This system should introduce large bodies of pure air into each room without a sensible draft, and be unaffected by the cold winds, which influence to a great degree the working of the indirect system of the old kind.

It ought to produce more economical results, first, because the occupants get the benefits of both radiated and conducted heat; second, because cold winds will not blow in directly over the radiators and chill the air shaft and the occupants of the room; and third, all the heating surface in unoccupied rooms can be cut off from steam circulation by simply closing the valves.

It will give good ventilation because it provides for the introduction into the center of the building of large bodies of pure air (warm), which pass into the various rooms, are farther heated, and then pass off in foul air ducts, which are heated. The saving in coal should be, for the reasons stated, a large per cent of the amount previously used.

The specifications of this work, provide for certain minor changes in the drips and positions of certain radiators to improve their efficiency. 3d.—For the construction of radiators out of the indirect heaters, by setting them on legs and enclosing them with a neat screen—the object of the screen being to prevent the children running against them, and to improve their appearance.

2d.—For the substitution in most of the rooms, direct radiators for the present indirect heaters.

4th.—Leave the rooms of the superintendent, the hospital in the north end (these rooms being in the same vertical plane), as they are at present, for the reason that the saving of fuel in these particular rooms will not compensate for the expense of the change.

5th.—Arrange the flues now taking the foul air from the halls to deliver pure air into the halls, by connecting them at the bottom with the pure outside air, and closing the tops so that no air will escape above the roof—the heaters in these flues are sufficient to warm the air and insure a circulation.

6th.—See that all foul air ducts leading from each room are in good condition and kept warm by a radiator in the bottom. Each flue should be 6x6 inches.

Respectfully submitted,

R. C. CARPENTER.

TREASURER'S REPORT.

LANSING, June 30, 1890.

To the Board of Control, Michigan School for the Blind:

GENTLEMEN—I herewith submit the biennial report of receipts and disbursements, account Michigan School for the Blind during the two fiscal years ending with the above date.

Respectfully,
D. L. CASE,
Treasurer.

Michigan School for the Blind in account with Daniel L. Case, Treasurer.

Date.			Dr.	Cr.
1888.				
July 1	By balance cash on hand			$8,048 18
	By cash receipts as follows as per vouchers and abstracts filed with auditor general.			
July 31	By cash receipts during month			152 72
August 31				76 38
Sept. 30				39 23
Oct. 31				378 72
Nov. 30				105 79
Dec. 31		$205 79		
		15,474 10		15,679 89
1889.				
Jan. 31				158 85
Feb. 28				169 78
March 31				114 43
April 30				12,626 17
May 31				1,325 15
June 30				213 81
	To disbursements as follows as per vouchers and abstracts filed with auditor general.			
1888.				
July 31	To cash disbnrsements account, current expenses		$1,050 53	
August 31	current expenses		735 19	
Sept. 30	current expenses		520 78	
Oct. 31	current expenses		1,755 80	
Nov. 30	current expenses		2,379 59	
Dec. 31	special appropriation	3,316 05		
		20 00	3,336 05	
1889.	current expenses		2,814 40	
Jan. 30	current expenses		2,981 56	
Feb, 28	current expenses		1,943 15	
March 31	current expenses		2,029 50	
April 30	To surplus returned to state treasurer		11,416 07	
April 30	returned to state treasurer		1,301 75	
May 31	returned to state treasurer		1,337 15	
June 30	To balance cash on hand		5,487 58	
	Total		$39,089 10	$39,089 10
July 1	By balance cash on hand			$548 58

Michigan School for the Blind in account with Daniel L. Case, Treasurer.

Date.			Dr.	Cr.
1889.				
July 1	By balance cash on hand			$5,487 58
	By cash receipts as follows as per vouchers and abstracts filed with auditor general.			
July 31	By cash receipts for month			289 11
August 31				133 45
Sept. 30				6,404 40
Oct. 31				52 54
Nov. 30				97 85
Dec. 31				1,247 33
1890.				
Jan. 31				99 10
Feb. 28				6,284 26
March 31				151 46
April 30				6,228 12
May 31				110 67
June 30				170 37
	To cash disbursement as follows as per vouchers and abstracts filed with auditor general.			
1889.				
July 31	To cash disbursements, account current expenses		$1,853 19	
August 31	current expenses	$970 78	2,035 40	
August 31	special appropriation	1,064 62		
Sept. 30	current expenses		990 97	
Oct. 31	current expenses		1,866 41	
Nov. 30	current expenses	2,842 75	2,944 35	
Nov. 30	special appropriation	101 60		
Dec. 31	current expenses		1,911 52	
1890.				
Jan. 31	current expenses		2,313 96	
Feb. 28	current expenses	1,804 22	1,824 22	
	special appropriation	20 00		
March 31	current expenses		2,027 67	
April 30	current expenses		2,361 82	
May 31	current expenses		2,521 69	
June 30	current expenses		1,356 83	
	To balance cash on hand		2,748 21	
	Total		$26,756 24	$26,756 24
July 1	By balance cash on hand			$2,748 27

SUMMARY OF INVENTORY.

Land and buildings, tile drainage, etc.	$169,920 97	
Heating and water apparatus	26,321 04	
Electric lighting	7,028 12	
Library and apparatus	3,155 78	
Laundry, machinery, fittings, etc.	1,141 58	
Broom shop machinery, stock, etc.	1,325 14	
Girls' sewing room	271 15	
School furniture	520 20	
Fuel	685 00	
Live stock	563 00	
Hay	127 00	
Music, musical instruments, etc.	3,775 75	
Office books, stationery, etc.	278 50	
Groceries and provisions	191 20	
Implements and tools	206 20	
Wagons, carriages, harness, etc.	317 50	
General furniture	6,520 81	
Kitchen and dinning room furniture	1,086 79	
Cottage furniture	1,117 87	
Medicine and medical apparatus	27 47	
Bedding, towels, linen, etc.	2,103 23	
Miscellaneous property	286 85	
		$226,971 15

July 1, 1890.

APPENDIX.

INFORMATION FOR THE PUBLIC.

The Michigan School for the Blind is located at Lansing, the Capital of the State, and occupies a beautiful site in the northwestern part of the city, within one mile of the capitol building.

It has capacity to accommodate all the blind children in the State, for whose benefit it was designed, and the Board of Control is extremely anxious that all who are of suitable age and condition to receive its benefits shall become its pupils.

The superintendent has had many years' experience in school management, and will do all in his power to make this school a pleasant and profitable home for its members.

The aim of the managers is to educate the blind wards of the State so that they may become self-sustaining and respected members of the community. Instruction is given in the branches usually taught in the common schools, in vocal and instrumental music, and in such trades and occupations as they are best able to pursue, and which offer them the best means of self-support.

The boys are taught broom making and piano tuning; the girls receive instruction in sewing, knitting, fancy work, etc. Besides these they receive daily instruction in the current events of the times, and such other training and influences are brought to bear upon them as are calculated to cultivate force of character, business methods, and becoming personal habits.

All persons, residents of this State, between the ages of ten and twenty-one years, who are blind, or whose defective sight prevents them from receiving instruction in the common schools, may be received as pupils in this school, provided they are in suitable condition of body and mind to receive instruction.

The Board of Control may admit persons under ten, or over twenty-one years of age, at their discretion.

All such blind persons are received without charge for tuition, boarding, lodging, washing, medicine, or medical attendance.

It is not an asylum for the aged and helpless, nor a hospital for the treatment of disease.

No person of confirmed immoral habits will be knowingly received into the school, and pupils may be discharged at any time for persistent disobedience, immoral conduct, or other sufficient cause.

Each pupil is entitled to the privileges of the school for a period of eight years, and the time may be extended to ten years when special reasons exist for so doing.

Persons wishing to become pupils should make application to the superintendent of the school for blank forms, which will be furnished at any time, and no pupil will be admitted to the school until this application has been returned with the questions which it contains satisfactorily answered.

Certain hours are set apart each day for out-door exercise, and each pupil is required to take this exercise unless excused.

Pupils are required to attend the Sunday morning service at the church which they or their parents may designate.

Letters for the pupils should be addressed in care of the School for the Blind, Lansing, Mich.

Terms begin the first Wednesday after the 12th of September in each year, and close the first Tuesday after the 18th of June, making a continuous term of forty weeks.

Pupils should be provided with good, comfortable clothing, for both winter and

summer use, in sufficient quantity to admit of the necessary changes for washing and mending.

In cases where friends of pupils are not able to furnish them with clothing and pay their traveling expenses, the same may be provided and charged to the county where the pupil resides.

Friends of pupils cannot be entertained at the expense of the institution, except when special privilege has been obtained of the superintendent.

Correspondence with reference to the needs of pupils, applications for admission, and letters of inquiry, should be addressed to

ROBERT BARKER,
Supt. of School for the Blind, Lansing, Mich.

TOM S. APPLEGATE, President.
J. W. BELKNAP, Vice-Pres. and Sec.
DANIEL L. CASE, Treasurer.
Board of Control.